Abstract of the Disclosure

A method for forming a single crystalline film including the steps of forming an amorphous film on a single crystalline substrate, forming an opening in the amorphous film and thereby exposing a part of a surface of the substrate, and introducing atomic beams, molecular beams or chemical beams onto the surface of the substrate at their incident angle of not more than 40 degrees with respect to the substrate surface under a reduced atmosphere and thereby selectively and epitaxially growing a single crystalline film on the exposed surface of the substrate and then in a lateral direction parallel to the surface of the substrate on the amorphous film.